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EXAMINER	
ALIA, CURTIS A	

ART UNIT	PAPER NUMBER
2474	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

IPOPS.LEGAL@agilent.com

Office Action Summary	Application No.	Applicant(s)	
	10/791,117	WARD, ROBERT GEOFFREY	
	Examiner	Art Unit	
	Curtis A. Alia	2474	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 September 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Applicant's amendment filed on 2 September 2009 has been entered. Claims 1, 9 and 17 have been amended. Claims 1-24 are still pending in this application, with claims 1, 9 and 17 being independent. Please note that AU 2416 has been changed to AU 2474.

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Arguments

2. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. Claims 17-24 objected to because of the following: The claims appear to be directed to a non-transitory medium. Therefore it is suggested to change "a computer readable medium" to --- a non-transitory computer readable medium --- so as to explicitly exclude any form of transitory medium. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding independent claims 1, 9 and 17, in light of the amendments made to the claims, it is unclear to the Examiner how an index can be retrieved for an ATM AAL5 cell based on supplying a VPI/VCI *and* a CID. Since AAL5 cells do not contain CID (only AAL2 cells do), and since the claims state that the ATM cells comprise *at least one of* VPI, VCI and CID, it seems that the Applicant intended to provide the index based on just VPI and VCI information. If this is the case, it is suggested to amend the claims to reflect as such.

Also regarding independent claims 1, 9 and 17, it is unclear as to whether the ATM data is being stored in the circular buffer (e.g., claim 1, line 3) or the index is being stored in the circular buffer (e.g., claim 1, line 10). It is suggested to amend the claims to more precisely identify what data is being stored in the circular buffer, as it fails to particularly point out and distinctly claim the circular buffer's contents.

Claim Rejections - 35 USC § 103

5. Claims 1-2, 9-10, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karlsson et al. (previously cited US 7,269,175) in view of Kalkunte et al. (newly cited US

2003/0231635), VanDervort (previously cited US 2003/0088685) and Takada et al. (previously cited US 6,850,520).

Regarding claim 1, Karlsson discloses a system wherein ATM data comprising information divided into ATM cells (see column 2, lines 13+, ATM uses fixed length cells), the ATM cells comprising at least one of virtual path identifier (VPI) information, virtual channel identifier (VCI) and channel identifier (CID) information (see column 9, lines 52+, VPI/VCI, column 11, lines 56-58, channel identifier in AAL packet), and a content addressable memory configured to receive any of the VPI, VCI and CID information related to each ATM cell and configured to provide an index when particular VPI, VCI and CID information is identified, the index corresponding to unique VPI/VCI and VPI/VCI+CID combinations (see column 9, lines 52+, the VPI/VCI are used to find the entry in the look up table, the entry having an index that is used to retrieve the data, so that the AAL packet can be forwarded) and the AAL2 cells and AAL 5 cells are reassembled in real time into frames of ATM data (see column 5, lines 12+, AAL2 SAR reassembles AAL2 data that is used for VoATM applications, which is a real-time application, and AAL5 SAR reassembles the AAL5 data that is used for VoIP application, which is a real-time application). For an ATM AAL2 packet that has a CID (see column 11, lines 56+), it would be obvious to use the CID in combination with the VPI/VCI for complete identification purposes to distinguish between ATM cells that have the same VPI/VCI with different CIDs because of the inherent property of AAL2 having the capability to transmit multiple multiplexed channels of real-time data (such as voice) over a single VPI/VCI connection.

Karlsson teaches a FIFO but does not teach a circular buffer for storing ATM data.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Kalkunte. In particular, Kalkunte teaches a circular buffer for storing ATM data (see paragraphs 31-33, scheduler queues the ATM cells in the wheels (circular buffers) for further processing).

In view of the above, having the system of Karlsson, then given the well-established teaching of Kalkunte, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson as taught by Kalkunte, since Kalkunte stated that shaping for different types of traffic can be achieved more efficiently.

Karlsson and Kalkunte do not explicitly teach a plurality of parallel processing elements configured to analyze the ATM cells.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Takada. In particular, Takada teaches a plurality of parallel processing elements (see column 2, lines 32-45, parallel processing of ATM cells) configured to analyze the ATM cells (see column 2, lines 32-45, each cell processor is provided with a cell identifying section that determines and the cell type from the header information).

In view of the above, having the system of Karlsson and Kalkunte, then given the well-established teaching of Takada, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson and Kalkunte as taught by Takada, since Takada stated that the various OAM cell types to quickly detect failures and changes in quality.

Karlsson, Kalkunte and Takada do not explicitly teach that the index corresponding to each ATM cell is placed in the circular buffer or determining a cell type using the index, and determining the AAL mode if any of each cell.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the index corresponding to each ATM cell is placed in the circular buffer (see column 14, lines 23-30, index returned by the CAM when fining a particular VPI/VCI combination is sent to and stored by a FIFO, this FIFO buffer can be combined with the circular buffer as taught by Kalkunte because they are both buffers that store data relating to ATM cells) or determining a cell type using the index and determining the AAL mode if any of each cell (see column 16, Table I, statistical information obtained by the device includes cell type and AAL mode).

In view of the above, having the system of Karlsson, Kalkunte and Takada, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Kalkunte and Takada as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 2, Karlsson and Kalkunte do not explicitly teach that the circular buffer communicates with the plurality of parallel processing elements simultaneously.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Takada. In particular, Takada teaches that the circular buffer communicates with the plurality

of parallel processing elements simultaneously (see figure 4 and column 2, lines 27+, the parallel processors are all communicatively coupled to a judging section that buffers all ATM cells before making a judgment, thus having to be able to receive ATM cells from all cell processors at any time, even simultaneously).

In view of the above, having the method of Karlsson and Kalkunte, then given the well-established teaching of Takada, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Karlsson and Kalkunte as taught by Takada, since Takada stated that the various OAM cell types to quickly detect failures and changes in quality.

Regarding claim 9, Karlsson discloses a method wherein ATM data comprising information divided into ATM cells (see column 2, lines 13+, ATM uses fixed length cells), the ATM cells comprising at least one of virtual path identifier (VPI) information, virtual channel identifier (VCI) and channel identifier (CID) information (see column 11, lines 56-58, channel identifier in AAL packet), and receiving in a content addressable memory any of the VPI, VCI and CID information related to each ATM cell (see column 9, lines 52+, VPI/VCI, column 11, lines 56-58, channel identifier in AAL packet), providing an index when particular VPI, VCI and CID information is identified, the index corresponding to unique VPI/VCI and VPI/VCI+CID combinations (see column 9, lines 52+, the VPI/VCI are used to find the entry in the look up table, the entry having an index that is used to retrieve the data, so that the AAL packet can be forwarded) and the AAL2 cells and AAL 5 cells are reassembled in real time into frames of ATM data (see column 5, lines 12+, AAL2 SAR reassembles AAL2 data that is used for

VoATM applications, which is a real-time application, and AAL5 SAR reassembles the AAL5 data that is used for VoIP application, which is a real-time application). For an ATM AAL2 packet that has a CID (see column 11, lines 56+), it would be obvious to use the CID in combination with the VPI/VCI for complete identification purposes to distinguish between ATM cells that have the same VPI/VCI with different CIDs because of the inherent property of AAL2 having the capability to transmit multiple multiplexed channels of real-time data (such as voice) over a single VPI/VCI connection.

Karlsson teaches providing ATM data to a FIFO but does not explicitly teach providing ATM data to a circular buffer or storing the ATM data in the circular buffer, the index placed in the circular buffer.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Kalkunte. In particular, Kalkunte teaches providing ATM data to a circular buffer and storing the ATM data in the circular buffer (see paragraphs 31-33, scheduler queues the ATM cells in the wheels (circular buffers) for further processing).

In view of the above, having the system of Karlsson, then given the well-established teaching of Kalkunte, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson as taught by Kalkunte, since Kalkunte stated that shaping for different types of traffic can be achieved more efficiently.

Karlsson and Kalkunte do not explicitly teach analyzing the ATM cells and determine a cell type.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Takada. In particular, Takada teaches analyzing the ATM cells and determine a cell type (see

column 2, lines 32-45, each cell processor is provided with a cell identifying section that determines and the cell type from the header information).

In view of the above, having the method of Karlsson and Kalkunte, then given the well-established teaching of Takada, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Karlsson and Kalkunte as taught by Takada, since Takada stated that the various OAM cell types to quickly detect failures and changes in quality.

Karlsson, Kalkunte and Takada do not explicitly teach placing the index corresponding to each ATM cell in the circular buffer, determining a cell type using the index, or determining the ALL mode if any of each cell.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the index corresponding to each ATM cell is placed in the circular buffer (see column 14, lines 23-30, index returned by the CAM when fining a particular VPI/VCI combination is sent to and stored by a FIFO, this FIFO buffer can be combined with the circular buffer as taught by Kalkunte because they are both buffers that store data relating to ATM cells) or determining a cell type using the index and determining the AAL mode if any of each cell (see column 16, Table I, statistical information obtained by the device includes cell type and AAL mode).

In view of the above, having the method of Karlsson, Kalkunte and Takada, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Karlsson, Kalkunte and Takada as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that

measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 10, Karlsson and Kalkunte do not explicitly teach simultaneously communicating between the circular buffer and the plurality of parallel processing elements.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Takada. In particular, Takada teaches simultaneously communicating between the circular buffer and the plurality of parallel processing elements (see figure 4 and column 2, lines 27+, the parallel processors are all communicatively coupled to a judging section that buffers all ATM cells before making a judgment, thus having to be able to receive ATM cells from all cell processors at any time, even simultaneously).

In view of the above, having the method of Karlsson and Kalkunte, then given the well-established teaching of Takada, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Karlsson and Kalkunte as taught by Takada, since Takada stated that the various OAM cell types to quickly detect failures and changes in quality.

Regarding claim 17, Karlsson discloses a computer readable medium (see column 7, lines 1+, firmware is stored in a computer readable medium (i.e., EEPROM)) wherein ATM data comprising information divided into ATM cells (see column 2, lines 13+, ATM uses fixed length cells), the ATM cells comprising at least one of virtual path identifier (VPI) information, virtual channel identifier (VCI) and channel identifier (CID) information (see column 11, lines 56-58,

channel identifier in AAL packet), and logic for receiving in a content addressable memory any of the VPI, VCI and CID information related to each ATM cell (see column 9, lines 52+, VPI/VCI, column 11, lines 56-58, channel identifier in AAL packet), logic for providing an index when particular VPI, VCI and CID information is identified, the index corresponding to unique VPI/VCI and VPI/VCI+CID combinations (see column 9, lines 52+, the VPI/VCI are used to find the entry in the look up table, the entry having an index that is used to retrieve the data, so that the AAL packet can be forwarded) and the AAL2 cells and AAL 5 cells are reassembled in real time into frames of ATM data (see column 5, lines 12+, AAL2 SAR reassembles AAL2 data that is used for VoATM applications, which is a real-time application, and AAL5 SAR reassembles the AAL5 data that is used for VoIP application, which is a real-time application). For an ATM AAL2 packet that has a CID (see column 11, lines 56+), it would be obvious to use the CID in combination with the VPI/VCI for complete identification purposes to distinguish between ATM cells that have the same VPI/VCI with different CIDs because of the inherent property of AAL2 having the capability to transmit multiple multiplexed channels of real-time data (such as voice) over a single VPI/VCI connection.

Karlsson teaches logic for providing ATM data to a FIFO but does not explicitly teach providing ATM data to a circular buffer or storing the ATM data in the circular buffer, the index placed in the circular buffer.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Kalkunte. In particular, Kalkunte teaches logic for providing ATM data to a circular buffer and storing the ATM data in the circular buffer (see paragraphs 31-33, scheduler queues the ATM cells in the wheels (circular buffers) for further processing).

In view of the above, having the system of Karlsson, then given the well-established teaching of Kalkunte, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson as taught by Kalkunte, since Kalkunte stated that shaping for different types of traffic can be achieved more efficiently.

Karlsson and Kalkunte do not explicitly teach logic for analyzing the ATM cells and determine a cell type.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Takada. In particular, Takada teaches logic for analyzing the ATM cells and determine a cell type (see column 2, lines 32-45, each cell processor is provided with a cell identifying section that determines and the cell type from the header information).

In view of the above, having the method of Karlsson and Kalkunte, then given the well-established teaching of Takada, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Karlsson and Kalkunte as taught by Takada, since Takada stated that the various OAM cell types to quickly detect failures and changes in quality.

Karlsson, Kalkunte and Takada do not explicitly teach placing the index corresponding to each ATM cell in the circular buffer, determining a cell type using the index, or determining the ALL mode if any of each cell.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the index corresponding to each ATM cell is placed in the circular buffer (see column 14, lines 23-30, index returned by the CAM when fining a particular VPI/VCI combination is sent to and stored by a FIFO, this FIFO buffer

can be combined with the circular buffer as taught by Kalkunte because they are both buffers that store data relating to ATM cells) or determining a cell type using the index and determining the AAL mode if any of each cell (see column 16, Table I, statistical information obtained by the device includes cell type and AAL mode).

In view of the above, having the medium of Karlsson, Kalkunte and Takada, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the medium of Karlsson, Kalkunte and Takada as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 18, Karlsson and Kalkunte not explicitly teach logic for simultaneously communicating between the circular buffer and the plurality of parallel processing elements.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Takada. In particular, Takada teaches logic for simultaneously communicating between the circular buffer and the plurality of parallel processing elements (see figure 4 and column 2, lines 27+, the parallel processors are all communicatively coupled to a judging section that buffers all ATM cells before making a judgment, thus having to be able to receive ATM cells from all cell processors at any time, even simultaneously).

In view of the above, having the computer readable medium of Karlsson and Kalkunte, then given the well-established teaching of Takada, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the computer readable

medium of Karlsson and Kalkunte as taught by Takada, since Takada stated that the various OAM cell types to quickly detect failures and changes in quality.

6. Claims 3-8, 11-16, and 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karlsson in view of Kalkunte, Takada and VanDervort as applied to claims 2, 10 and 18 above, and further in view of Suzuki et al. (previously cited US 6,687,250).

Regarding claim 3, Karlsson, Kalkunte, Takada and VanDervort do not explicitly teach a fragmentation table configured to receive and store data fragments associated with an ATM cell.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches a fragmentation table configured to receive and store data fragments associated with an ATM cell (see column 1, lines 48-58, receiving and reassembling ATM cells and storing the reassembled frames is essentially where fragments of ATM data are stored).

In view of the above, having the system of Karlsson, Kalkunte, Takada and VanDervort, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Kalkunte, Takada and VanDervort as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

Regarding claim 4, Karlsson, Kalkunte, Takada and VanDervort do not explicitly teach a buffer manager configured to accumulate the data fragments and assemble the data fragments into a frame.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches a buffer manager configured to accumulate the data fragments and assemble the data fragments into a frame (see column 1, lines 45-58, the ATM cells are received and reassembled into frames).

In view of the above, having the system of Karlsson, Kalkunte, Takada and VanDervort, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Kalkunte, Takada and VanDervort as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

Regarding claim 5, Karlsson, Kalkunte and Takada do not explicitly teach a statistics memory configured to store statistics associated with the cells.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches a statistics memory configured to store statistics associated with the cells (see column 13, lines 40-51, test processor includes means for recording occurrences of certain conditions/errors, column 15, lines 16-19, tracking utilization of the network as statistics).

In view of the above, having the system of Karlsson, Kalkunte and Takada, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Kalkunte and Takada as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 6, Karlsson, Kalkunte and Takada do not explicitly teach that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error count, and resource management cell count.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error count, and resource management cell count (see column 16, Table 1 shows many of the statistics gathered, including two CLP bits (indicating whether the cell is an idle cell or an unassigned cell if a VCI/VIP is a null value), a plurality of OAM cell statistics, AAL3/4 (replaceable by AAL2 statistics for AAL2 SARs) and AAL5 statistics, HEC error statistics, congestion information, AAL3/4 CRC error counts (capable of collecting AAL5 CRC error counts instead), and RM cell information.).

In view of the above, having the system of Karlsson, Kalkunte and Takada, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Kalkunte and Takada as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 7, Karlsson, Kalkunte and Takada do not explicitly teach that the statistics are gathered for each unique VPI/VCI cell stream.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are gathered for each unique VPI/VCI cell stream (see column 15, lines 16-19, statistics are gathered to track network utilization with respect to each virtual connection being monitored).

In view of the above, having the system of Karlsson, Kalkunte and Takada, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Kalkunte and Takada as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 8, Karlsson, Kalkunte and Takada do not explicitly teach that the statistics are periodically provided to a processor for display.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are periodically provided to a processor for display (see column 15, lines 35-46, the statistics are passed to the host processor at regular time intervals, where which the results can be sent to the user via a user interface (any type of display means)).

In view of the above, having the system of Karlsson, Kalkunte and Takada, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Kalkunte and Takada as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 11, Karlsson, Kalkunte, Takada and VanDervort do not explicitly teach receiving and storing data fragments associated with an ATM cell in a fragmentation table.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches receiving and storing data fragments associated with an ATM cell in a fragmentation table (see column 1, lines 48-58, receiving and reassembling ATM cells and storing the reassembled frames).

In view of the above, having the method of Karlsson, Kalkunte, Takada and VanDervort, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Karlsson, Kalkunte, Takada and VanDervort as taught by Suzuki, since Suzuki stated in column 1, lines

38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

Regarding claim 12, Karlsson, Kalkunte, Takada and VanDervort do not explicitly teach accumulating the data fragments in a buffer manager and assembling the data fragments into a frame.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches accumulating the data fragments in a buffer manager and assembling the data fragments into a frame (see column 1, lines 45-58, the ATM cells are received and reassembled into frames).

In view of the above, having the method of Karlsson, Kalkunte, Takada and VanDervort, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the method of Karlsson, Kalkunte, Takada and VanDervort as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

Regarding claim 13, Karlsson, Kalkunte and Takada do not explicitly teach storing statistics associated with the cells in a statistics memory.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches storing statistics associated with the cells in a statistics memory (see column 13, lines 40-51, test processor includes means for recording

occurrences of certain conditions/errors, column 15, lines 16-19, tracking utilization of the network as statistics).

In view of the above, having the system of Karlsson, Kalkunte and Takada, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Kalkunte and Takada as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 14, Karlsson, Kalkunte and Takada do not explicitly teach that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error count, and resource management cell count.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error count, and resource management cell count (see column 16, Table 1 shows many of the statistics gathered, including two CLP bits (indicating whether the cell is an idle cell or an unassigned cell if a VCI/VIP is a null value), a plurality of OAM cell statistics, AAL3/4 (replaceable by AAL2 statistics for AAL2 SARs) and AAL5 statistics, HEC error statistics, congestion information,

AAL3/4 CRC error counts (capable of collecting AAL5 CRC error counts instead), and RM cell information.).

In view of the above, having the system of Karlsson, Kalkunte and Takada, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Kalkunte and Takada as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 15, Karlsson, Kalkunte and Takada do not explicitly teach that the statistics are gathered for each unique VPI/VCI cell stream.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are gathered for each unique VPI/VCI cell stream (see column 15, lines 16-19, statistics are gathered to track network utilization with respect to each virtual connection being monitored).

In view of the above, having the system of Karlsson, Kalkunte and Takada, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Kalkunte and Takada as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 16, Karlsson, Kalkunte and Takada do not explicitly teach that the statistics are periodically provided to a processor for display.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are periodically provided to a processor for display (see column 15, lines 35-46, the statistics are passed to the host processor at regular time intervals, where which the results can be sent to the user via a user interface (any type of display means)).

In view of the above, having the system of Karlsson, Kalkunte and Takada, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Kalkunte and Takada as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 19, Karlsson, Kalkunte, Takada and VanDervort do not explicitly teach logic for receiving and storing data fragments associated with an ATM cell in a fragmentation table.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches logic for receiving and storing data fragments associated with an ATM cell in a fragmentation table (see column 1, lines 48-58, receiving and reassembling ATM cells and storing the reassembled frames).

In view of the above, having the computer readable medium of Karlsson, Kalkunte, Takada and VanDervort, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the computer readable medium of Karlsson, Kalkunte, Takada and VanDervort as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

Regarding claim 20, Karlsson, Kalkunte, Takada and VanDervort do not explicitly teach logic for accumulating the data fragments in a buffer manager, and logic for assembling the data fragments into a frame.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by Suzuki. In particular, Suzuki teaches logic for accumulating the data fragments in a buffer manager, and logic for assembling the data fragments into a frame (see column 1, lines 45-58, the ATM cells are received and reassembled into frames).

In view of the above, having the computer readable medium of Karlsson, Kalkunte, Takada and VanDervort, then given the well-established teaching of Suzuki, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the computer readable medium of Karlsson, Kalkunte, Takada and VanDervort as taught by Suzuki, since Suzuki stated in column 1, lines 38-44 that the priority in the upper layers can be reflected in the SAR processing of the ATM cells.

Regarding claim 21, Karlsson, Kalkunte and Takada do not explicitly teach storing statistics associated with the cells in a statistics memory.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches storing statistics associated with the cells in a statistics memory (see column 13, lines 40-51, test processor includes means for recording occurrences of certain conditions/errors, column 15, lines 16-19, tracking utilization of the network as statistics).

In view of the above, having the system of Karlsson, Kalkunte and Takada, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Kalkunte and Takada as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 22, Karlsson, Kalkunte and Takada do not explicitly teach that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error count, and resource management cell count.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are chosen from an idle cell, an unassigned cell, an operation and maintenance cell, an AAL2 cell, an AAL5 cell, a header error correction error cell, a frame count, a byte count, congestion information, AAL5 CRC error

count, and resource management cell count (see column 16, Table 1 shows many of the statistics gathered, including two CLP bits (indicating whether the cell is an idle cell or an unassigned cell if a VCI/VIP is a null value), a plurality of OAM cell statistics, AAL3/4 (replaceable by AAL2 statistics for AAL2 SARs) and AAL5 statistics, HEC error statistics, congestion information, AAL3/4 CRC error counts (capable of collecting AAL5 CRC error counts instead), and RM cell information.).

In view of the above, having the system of Karlsson, Kalkunte and Takada, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Kalkunte and Takada as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 23, Karlsson, Kalkunte and Takada do not explicitly teach that the statistics are gathered for each unique VPI/VCI cell stream.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches that the statistics are gathered for each unique VPI/VCI cell stream (see column 15, lines 16-19, statistics are gathered to track network utilization with respect to each virtual connection being monitored)

In view of the above, having the system of Karlsson, Kalkunte and Takada, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Kalkunte

and Takada as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Regarding claim 24, Karlsson, Kalkunte and Takada do not explicitly teach that the statistics are periodically provided to a processor for display.

However, the above-mentioned claimed limitation is well known in the art, as evidenced by VanDervort. In particular, VanDervort teaches hat the statistics are periodically provided to a processor for display (see column 15, lines 35-46, the statistics are passed to the host processor at regular time intervals, where which the results can be sent to the user via a user interface (any type of display means)).

In view of the above, having the system of Karlsson, Kalkunte and Takada, then given the well-established teaching of VanDervort, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the system of Karlsson, Kalkunte and Takada as taught by VanDervort, since VanDervort stated in column 6, lines 25-37 that measuring and collecting aggregate network utilization data is used to determine ways of improving the performance of the high speed ATM networks.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis A. Alia whose telephone number is (571) 270-3116. The examiner can normally be reached on Monday through Friday, 9am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung S. Moe can be reached on (571) 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aung S. Moe/
Supervisory Patent Examiner, Art Unit 2474

/Curtis A Alia/
Examiner, Art Unit 2474
12/20/2009

CAA